STANDARDS PRESENTATION TO

CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH STANDARDS BOARD

PROPOSED STATE STANDARD, TITLE 8, CHAPTER 4

Amend Section 1720 to read:

§1720. Placement of Concrete.

- (a) Concrete Buggies.
- (1) Handles of buggies shall not extend beyond the wheels on either side of the buggy.
- (2) Handles shall be guarded or equipped with knuckle guards.
- (b) Pumperete Systems Concrete Pumps and Placing Booms.
- (1) Pumperete or similar systems using discharge pipes shall be provided with pipe supports designed for 100 percent overload Scope. This subsection is applicable to truck-mounted concrete boom pumps, trailer-mounted concrete pumps and separate concrete placing booms.
- (2) Compressed air hose in such systems shall be provided with fail-safe joint connectors to prevent separation of sections when pressurized <u>Definitions</u>.

Concrete delivery hose. A flexible delivery hose having a coupling on each end.

Control panel. The place where the control actuating devices for the operation of the machine are located.

<u>Delivery system.</u> Delivery lines, hoses, and their components, as well as transfer valves, through which the material to be transported is pumped.

End hose. A flexible concrete delivery hose which has only one end coupling.

Placing boom. Manual or power driven, slewable working device, consisting of one or more extendable or foldable parts which support the concrete delivery system, and which direct the discharge into the desired location.

Remote control. A control device for the machine that is portable and may be connected to the machine by a wire umbilical cord or linked by radio or other wireless means.

- (3) General.
- (A) Equipment identification and ratings.
- 1. The following information shall be legibly marked on a durable identification plate on the concrete pump.
 - a. Manufacturer's name.
 - b. Year of manufacture.
 - c. Serial number.
 - d. Type or model identification.
 - e. Maximum working pressure in the hydraulic system.
 - f. Maximum material pressure.
 - g. Power rating for electrical equipment (voltage, frequency, amperage).
 - 2. The following information shall be legibly marked on a durable identification plate on the placing boom.
 - a. Manufacturer's name.
 - b. Year of manufacture.
 - c. Serial number.
 - d. Type or model identification.

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- e. Maximum working pressure in the hydraulic system.
- f. Maximum weight per foot of the delivery system, including concrete at 150 lbs/foot³.
- (B) Set-up and operation. Concrete pumping equipment and placing booms shall be set-up and operated in accordance with the manufacturer's operation and safety manuals, and these Orders.
- 1. The manufacturer's operation manual shall be maintained in legible condition and shall be available to the operator during set-up and operation of the equipment.
 - 2. The concrete placing boom shall not be used to drag hoses or lift other loads.
 - 3. Concrete delivery hoses shall not be used as end hoses.

EXCEPTIONS for (B)3:

- 1. Shotcrete operations.
- 2. When the hose is supported by the walking/working surface while pumping and placing flatwork.

(C) Controls.

- 1. Controls shall have their function clearly marked.
- 2. If there are several control locations, the same operation shall only be possible from one location at a time.

EXCEPTION for (C)2:

Emergency stop controls required by subsection (b)(3)(C)4 shall have priority and shall be operable from any installed location.

- 3. Controls shall be safeguarded against unintentional operation.
- EXCEPTION for (C)3: Equipment manufactured before [OAL to insert the effective date of the regulation].
- 4. Each machine shall be equipped with an emergency stop system.
- a. The machine shall be equipped with emergency stop devices at the control panels and at the remote control device.
- (D) Guarding. Guarding shall be provided and maintained in accordance with the manufacturers' specifications to prevent unintentional access to moving parts.
 - (E) Delivery systems.
- 1. Concrete pumping systems using discharge pipes shall be provided with pipe supports designed for twice the rated load, including concrete at 150 lbs/ft³.
- 2. Compressed air hoses, if used, shall be equipped with connecting ends that shall be chained or otherwise secured to prevent whipping in case of separation when pressurized.
- (F) Operation of concrete placing booms in proximity of overhead high-voltage lines shall be in accordance with Article 37 of the High-Voltage Electrical Safety Orders.
- 1. Warning signs. Concrete placing booms shall be posted with durable warning signs in accordance with Section 2947.

EXCEPTION: Minimum clearances from overhead high-voltage lines in accordance with manufacturers' specifications may be posted where minimum clearance distances are greater than those prescribed by Article 37 of the High-Voltage Electrical Safety Orders.

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- (4) Inspection, maintenance and repairs.
- (A) A qualified attendant or operator shall visually inspect the machine's controls and functional mechanisms for maladjustment, damage or deterioration prior to daily use. Any condition that affects the safe operation shall be corrected prior to use.
- 1. Hoses, clamps and pipes shall be inspected by a qualified attendant or operator prior to use. Damaged or defective hoses, clamps or pipes shall not be used.
- (B) A preventative maintenance program shall be established and implemented in accordance with the manufacturer's specifications.
- (C) Inspection, maintenance and repairs shall be performed by a qualified person in accordance with the manufacturer's specifications and procedures.
 - (D) Inspection records shall include the following:
 - 1. A listing of the components and parts inspected and tested.
 - 2. A brief description of test methods, results, and repairs made.
 - 3. Names and signatures of persons performing the inspections.
- (E) Records of inspections and maintenance shall be made available to the Division on request.
 - (5) Manufacturer no longer in business.
- (A) If the manufacturer is no longer in business and manufacturer's specifications are no longer available, required set-up, operation, inspection, and maintenance procedures and repairs shall be specified by a qualified person experienced in the field of concrete pumps and placing booms.
- (B) Inspection, maintenance and repairs shall be performed by a qualified person in accordance with the specifications and procedures established under the provisions of subsection (b)(5)(A).

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NOTE: Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.